

ABSTRACT

A switching power supply; wherein a voltage detector is provided at the output of a power supply circuit and connected to the negative input of an error amplifier to amplify the error between detected voltage and reference voltage, the output of said amplifier is connected to the negative input of a first comparator and to the negative input of a second comparator through split resistors, a filter circuit is connected between a control switch and synchronous switch and the output of said filter circuit is connected to a first comparator and a second comparator, wherein said configuration constitutes a control means to control the amplitude of the triangular waveform obtained through said filter circuit to be between an input level of said first comparator and an input of said second comparator, whereby the stability of the switching power supply is ensured without lowering the frequency band of said amplified error signal and stable output ripple characteristics can be materialized.